STATE OF ILLINOIS ILLINOIS COMMERCE COMMISSION

ROCK ISLAND CLEAN LINE LLC)	
)	
Petition for an Order granting Rock Island)	
Clean Line LLC a Certificate of Public)	
Convenience and Necessity pursuant to)	
Section 8-406 of the Public Utilities Act as a)	Docket No. 12-0560
Transmission Public Utility and to)	
Construct, Operate and Maintain an Electric)	
Transmission Line and Authorizing and)	
Directing Rock Island Clean Line Pursuant)	
to Section 8-503 of the Public Utilities Act to)	
Construct an Electric Transmission Line.)	

INITIAL BRIEF OF ENVIRONMENTAL INTERVENORS

January 31, 2014

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I. Introduction

The Illinois Commerce Commission ("ICC" or "Commission") has before it the petition ("Petition") of Rock Island Clean Line LLC ("RICL") for an order granting RICL a Certificate of Public Convenience and Necessity ("CPCN") pursuant to Section 8-406 of the Public Utilities Act ("PUA") (220 ILCS 5/8-406). The CPCN will allow RICL to operate as a transmission public utility in Illinois and to construct, operate, and maintain an electric transmission line ("Project") in Illinois. RICL Petition at page 1. RICL also seeks authorization and direction from the Commission to construct the Project pursuant to Section 8-503 of the PUA (220 ILCS 5/8-503). RICL Petition at page 1. Intervenors Environmental Law and Policy Center and Natural Resources Defense Council (collectively "Environmental Intervenors") support RICL's Petition, and request that the Commission grant RICL public utility status and direct it to construct the Project.

RICL's Project is a 600 kV high-voltage direct current transmission line and associated facilities that will run from northwestern Iowa to Illinois. RICL Petition at page 2. Once in Illinois, the line will interconnect with the transmission system at the Collins substation in Grundy County. *Id* at page 3. The Project is designed to deliver to Illinois up to 3,500 MW – 15 million MWh – of electricity from high capacity factor, low-cost wind resources from Iowa, Nebraska, South Dakota, and Minnesota. *Id* at pages 8. The Project will deliver enough power on an annual basis to meet the electricity needs of approximately 1.4 million homes. RICL Exhibit 10.26 at page 23. Importantly, as RICL Witness Berry testified, RICL's merchant generator status means it is "not asking to recover costs from Illinois ratepayers." RICL Exhibit 10.14 Revised at page 28. RICL will earn its rate of return from entities purchasing transmission capacity on the line: "generators, wholesale power purchasers, other wholesale market

participants, or retail purchasers who decide specifically to contract for power and for the shipment of power via the Project." *Id* at page 28. Illinois customers stand to gain significant benefits in the form of access to electricity from low-cost (including zero-fuel cost) renewable energy resources at no financial risk.

Pursuant to Section 8-406(b) of the PUA, RICL's Project will "promote the public convenience and necessity" by "promot[ing] the development of an effectively competitive electricity market." 220 ILCS 5/8-406(b). The Project meets this requirement by providing economic and environmental benefits to Illinois and the region by satisfying the large demand for low-cost electricity. Specifically:

- The Project will provide access to renewable energy resources needed to meet Illinois' Renewable Portfolio Standard ("RPS") requirement and will allow Illinois and other states to comply with RPS compliance requirements in a cost-effective manner.
- The additional supply of renewable energy to Illinois and PJM will increase competition among suppliers of electricity and will exert downward pressure on wholesale energy prices, which will in turn result in lower retail electricity prices.
- Delay of the CPCN pending complete financing of the Project would create a major competitive barrier for any independent, merchant transmission project to compete on a level playing field with incumbent transmission-owning utilities.
- By transmitting electricity from low-cost wind resources in northwestern Iowa to the Chicago and the northwest Illinois region, the Project will reduce the need to dispatch more expensive and more environmentally damaging generation sources, thereby reducing overall power plant air, water and solid waste pollution.
- Construction in a timely manner will allow the Project to help supply some of the renewable resources necessary to bring Illinois into compliance with the impending federal regulations and state implementation plan requirements under Section 111(d) of the Clean Air Act.

• Finally, delay of the Project pending completion of PJM and Midcontinent ISO ("MISO") interconnection studies will unnecessarily delay the Project's environmental and economic benefits for consumers and the environment.

For these reasons, as detailed below, the Commission should grant RICL's Petition.

IV. Public Utilities Act §8-406– Request for Certificate for the Rock Island Project

A. Statutory Prerequisites for Public Convenience and Necessity

1. Necessary to provide adequate, reliable, efficient service or will promote the development of an effectively competitive electricity market

Illinois law, under Section 8-406(b) of the PUA, requires that the Commission grant RICL a CPCN if RICL demonstrates:

(1) that the proposed construction is necessary to provide adequate, reliable, and efficient service to its customers and is the least-cost means of satisfying the service needs of its customers or that the proposed construction will promote the development of an effectively competitive electricity market that operates efficiently, is equitable to all customers, and is the least cost means of satisfying those objectives; (2) that the utility is capable of efficiently managing and supervising the construction process and has taken sufficient action to ensure adequate and efficient construction and supervision thereof; and (3) that the utility is capable of financing the proposed construction without significant adverse financial consequences for the utility or its customers.

220 ILCS 5/8-406(b). While Environmental Intervenors believe that RICL meets all three requirements, this brief will focus on requirements (1) and (3).

With regard to requirement (1), the law states that a utility can either (a) demonstrate that the project is necessary to provide adequate, reliable, and efficient service to its customers *or* (b) demonstrate that the proposed construction will promote the development of an effectively competitive electricity market. *Id.* RICL has demonstrated that its Project will promote the development of an effectively competitive electricity market.

i. The Project will increase the supply of renewable energy credits necessary to comply with the Illinois renewable portfolio standard

One way that the Project will promote the development of an effectively competitive electricity market pursuant to Section 8-406(b) of the PUA is by increasing the supply of renewable energy credits available for purchase by Illinois utilities. Pursuant to Section 1-75(c) of the PUA, utilities must comply with the Illinois RPS. 20 ILCS 3855/1-75(c). The RPS requires Illinois utilities to ensure that a certain percentage of the total energy supplied to their customers comes from renewable energy resources. Specifically, the RPS requires that at least 10% of a utility's total supply come from renewable resources by June 1, 2015. 20 ILCS 3855/1-75(c)(1). Each year after 2015, utilities must increase the total percentage of supply coming from renewable resources by at least 1.5%. *Id.* By 2025, utilizes must receive 25% of their total supply from renewables. *Id.*

Renewable energy resources are defined by Illinois law as

[E]nergy and its associated renewable energy credit or renewable energy credits from wind, solar thermal energy, photovoltaic cells and panels, biodiesel, anaerobic digestion, crops and untreated and unadulterated organic waste biomass, tree waste, hydropower that does not involve new construction or significant expansion of hydropower dams, and other alternative source of environmentally preferable energy.

20 ILCS 3855/1-10. A renewable energy credit ("REC") is, "[A] tradable credit that represents the environmental attributes of a certain amount of energy produced from a renewable energy resource. *Id.* Illinois utilities use RECs to meet their RPS obligation. Therefore, as REC prices fall, the cost of complying with the RPS will also fall.

RICL Witness Berry estimates that the Illinois RPS will result in renewable resources reaching "13.3 million MWh in 2015, 24.3 million MWh in 2020, and 36.2 million MWh in 2025." RICL Exhibit 10.0 at page 18. Mr. Berry derived these estimates using data from the U.S.

Energy Information Administration's 2012 Annual Energy Outlook. *Id.* RICL's Project is particularly well positioned to serve this increasing demand for wind resources. The Project is capable of delivering as much as 15 million MWh of electricity from wind generation into Illinois from high capacity-factor, low cost wind resources. RICL Petition at pages 8. This would meet all Illinois' RPS demand in the near future, and nearly half in 2025 according to Mr. Berry's estimates. As observed by Mr. Berry, in 2011, "total renewable generation [in Illinois] . . . was about 7.0 million MWh." RICL Exhibit 10.0 at page 19. As Mr. Berry stated, "the Project could deliver almost twice as much wind energy as is currently being produced in Illinois." *Id.* As explained below, this substantial wind resource will serve to drive down REC prices, making compliance cheaper for Illinois ratepayers. Since RICL is "not asking to recover costs [of the project] from Illinois ratepayers," this reduction in REC prices will come at no additional cost to the ratepayers. RICL Exhibit 10.14 Revised at page 28.

Though the Illinois RPS is the single most significant driver of renewable energy in Illinois at the moment, the rise of alternative retail electric suppliers ("ARES") in the state could drive additional demand for supply from renewable resources. As Mr. Berry explained, a number of municipalities "have required the alternative retail provider to obtain a significant portion of its electricity supply from additional renewable resources beyond the RPS minimum requirements, or to offer the retail customers an option to specify that a stated percentage of the electricity supplied must come from renewable resources above and beyond the RPS minimum requirements." RICL Exhibit 10.0 at pages 16-17. Therefore, in addition to the need for low-cost RECs to meet the RPS, Illinois ratepayers who choose an ARES with an additional renewable procurement requirement will further benefit from increased access to low-cost RECs.

ii. The Project will lower REC prices

The Project not only makes more RECs available to Illinois utilities, it also lowers the prices of all RECs in the region, making compliance with the Illinois RPS and other renewable requirements cheaper. As RICL Witness McDermott explained, "The Project is projected to provide access to new and currently untapped potential renewable resources that should have the effect of providing competitive pressure on prices in renewable energy credit ("REC") markets as well as competitive pressure on prices in markets for renewable energy." RICL Exhibit 4.0 Revised at pages 3-4.

Most states have either renewable energy standards or goals. RICL Exhibit 10.0 at page 17. As Mr. Berry stated, "Within the PJM footprint, the District of Columbia, Delaware, Maryland, Michigan, New Jersey West Virginia, North Carolina, Ohio, and Pennsylvania all have enacted renewable portfolio standards, in addition to Illinois." *Id.* RECs associated with generation in one state can used to satisfy RPSs in multiple states, which means, "[T]he prices of RECs in states tend to be linked." *Id.* Mr. Berry explained, "A shortfall in the supply of RECs to satisfy the RPS in one PJM state will tend to cause supply shortfalls in other states as well," which will raise REC prices for all states. *Id.* While this inverse relationship between the supply of RECs and their cost is intuitive and fits with the common understanding of supply and demand, it is not merely theoretical. As Mr. Berry explained, "This effect was observed in 2009, when REC's traded in both New Jersey and Illinois reached a high of over \$10/MWh due to limited supply but declined in a highly correlated fashion throughout 2010 and 2011. The price declines in 2010 and 2011 were a result of additional wind installations and the associated increase in REC supply." *Id.*

Dr. McDermott attempted to quantify the Project's effect on the REC market. Dr. McDermott conducted a study of the REC market as defined by REC facilities located in Illinois and adjoining states. This market is relevant because Section 1-75(c) of the PUA requires non-ARES utilities to give preference to RECs from Illinois and adjoining states. 20 ILCS 3855/1-75(c). Dr. McDermott also investigated the broader REC market defined as the REC facilities located within the entire Eastern Interconnection, which consists of "the entire Alternating Current ("AC") transmission system east of the Rocky Mountains, including parts of Canada and Texas." RICL Exhibit 4.0 Revised at page 6. Dr. McDermott found that the supply of RECs in both REC markets would increase as a result of the project. *Id* at pages 37-39. Dr. McDermott found that the project would increase the supply of RECs in the Illinois and adjoining States Energy REC market by as much 28% in 2020. Id. at page 39. Even under the Green Economy future, which assumes significant growth in competing REC supply, the project increases the REC market in Illinois and adjoining states by 10%. Id. Dr. McDermott also found significant benefits to the Eastern Interconnection market. While the magnitude of the Project's effects on this larger market are more modest, Dr. McDermott still found that an increase in the Eastern Interconnection REC Energy market of as much as 7% in 2020. Id. at page 39. The following are copies Dr. McDermott's tables of market effects:

Table 10: Change in REC Capacity (MW) - Illinois and Adjoining States*

			With Project	Without Project	Change
2016				_	
	Business as Usual	1	19,644	15,295	28%
	Green Economy	2	29,041	24,692	18%
	Robust Economy	3	19,644	15,295	28%
	Slow Growth	4	19,644	15,295	28%
2020					
	Business as Usual	5	20,714	16,365	27%
	Green Economy	6	47,407	43,058	10%
	Robust Economy	7	20,714	16,365	27%
	Slow Growth	8	20,714	16,365	27%

^{*}Adjoining states include all states that share a formal state boundary with Illinois.

Table 11: Change in REC Capacity (MW) - Eastern Interconnection

		•	With Project	Without Project	Change
2016			-	-	
	Business as Usual	1	55,182	50,833	9%
	Green Economy	2	85,863	81,514	5%
	Robust Economy	3	55,182	50,833	9%
	Slow Growth	4	55,182	50,833	9%
2020					
	Business as Usual	5	68,845	64,496	7%
	Green Economy	6	137,077	132,728	3%
	Robust Economy	7	68,845	64,496	7%
	Slow Growth	8	68,845	64,496	7%

Table 12: Change in REC Energy (GWh) - Illinois and Adjoining States*

			With Project	Without Project	Change
2016					
	Business as Usual	1	62,217	47,928	30%
	Green Economy	2	93,811	79,487	18%
	Robust Economy	3	62,268	48,006	30%
	Slow Growth	4	61,918	47,647	30%
2020					
	Business as Usual	5	65,720	51,373	28%
	Green Economy	6	152,863	138,633	10%
	Robust Economy	7	65,823	51,476	28%
	Slow Growth	8	65,265	50,925	28%

^{*}Adjoining states include all states that share a formal state boundary with Illinois.

Table 13: Change in REC Energy (GWh) - Eastern Interconnection

		•	With Project	Without Project	Change
2016			-	-	
	Business as Usual	1	194,663	180,377	8%
	Green Economy	2	292,407	278,098	5%
	Robust Economy	3	194,754	180,496	8%
	Slow Growth	4	193,127	178,856	8%
2020					
	Business as Usual	5	236,608	222,267	6%
	Green Economy	6	443,581	429,385	3%
	Robust Economy	7	236,871	222,532	6%
	Slow Growth	8	234,715	220,389	7%

Id. at pages 38-39.

Not only will the Project drive down REC prices by increasing the overall supply of RECs in the market, the Project also will reduce REC prices because of the lower energy cost of the wind generation that will use the Project. As Dr. McDermott explained, "[T]he differential wind speeds between Illinois and the area that will be served by the Project strongly suggests that potential wind resources served by the Project will have higher capacity factors than similar wind resources sited in Illinois." *Id.* at page 31. According to Mr. Berry, a higher capacity factor "substantially reduces the cost of wind energy produced by facilities located in areas with higher average wind speeds. As more energy is produced by a wind turbine, the unit cost of energy

decreases, because the upfront capital cost can be recovered over a large number of megawatt-hours." RICL Exhibit 10.0 at page 7. These lower prices are passed on to Illinois ratepayers in the form of cheaper RECs.

iii. The Project will increase generator competition and will exert downward pressure on wholesale energy prices, which will in turn result in lower retail electricity prices

As explained above, the Commission can grant a CPCN if the proposed project will "promote the development of an effectively competitive electricity market that operates efficiently, is equitable to all customers, and is the least cost means of satisfying those objectives." 220 ILCS 5/8-406(b). Just as the Project will increase the supply of low cost RECs, thereby driving down the price Illinois customers have to pay to comply with the RPS, the Project will also increase the supply of lower-cost generation, thereby driving down the price customers have to pay for electricity. As Dr. McDermott summarized, "The additional transmission capacity promotes an effectively competitive electricity market by increasing the size of the supply side of the market competing to serve load in Illinois and opening the Illinois market to lower cost generation resources." RICL Exhibit Revised 4.0 at page 2.

As RICL Witness Moland explained in his initial testimony, he "used the PROMOD production cost modeling software package to perform simulations of future energy markets for two representative study years, 2016 and 2020, to assess the economic [and environmental] impact of the Rock Island Project on system operations in Illinois." RICL Exhibit 3.0 at page 3. Mr. Moland's modeling relied on four different futures scenarios: (1) Business as Usual; (2) Slow Growth; (3) Robust Economy; and (4) Green Economy. RICL Exhibit 3.0 at pages 6-7.

Mr. Moland's analysis shows that just as the Project will lower emissions under all four futures scenarios, it will also lower the total demand costs, locational marginal prices ("LMP"),

and variable production costs, all of which result in lower retail prices for Illinois ratepayers. *Id.* at pages 10-11. Mr. Moland also found that the Project will reduce the congestion costs to Illinois ratepayers in seven of eight scenarios. RICL Exhibit 3.5 at page 3.

As Mr. Moland explained, demand costs represent "the total cost to purchase energy to supply total Illinois annual demand under RTO settlement rules." RICL Exhibit 3.0 at page 9. Mr. Moland found that the Project would reduce demand costs by between \$93 million and \$289 million in the 2020 futures scenarios. RICL Exhibit 3.3 at page 1.

Production costs represent the "[t]otal variable cost of generation to supply energy to meet Illinois annual demand including fuel costs, emission costs, variable operation and maintenance costs, and unit start up costs." RICL Exhibit 3.0 at page 9. Mr. Moland found that the Project would reduce production costs by between \$423 million and \$1.06 billion in the 2020 futures scenarios. RICL Exhibit 3.3 at page 3.

LMP represents the "[i]ncremental cost of energy averaged across all electrical load buses in Illinois." RICL Exhibit 3.0 at page 9. Therefore, if lower-cost generation such as wind-powered generation is available, it will serve to lower LMP. Mr. Moland found that the Project would reduce LMP by .07 \$/MWh and 2.14 \$/MWh in the 2020 futures scenarios. RICL Exhibit 3.3 at page 2.

Finally, congestion costs represent "the difference in marginal electricity price between different nodes on the system, [and] are included as a component of [LMP]." RICL Exhibit 3.5 at page 2. In three out of four 2020 futures scenarios, congestion costs were reduced by between \$100 million and \$126 million. RICL Exhibit 3.5 at page 3. While congestion costs are not reduced in the 2020 Green Economy future, Mr. Moland still found net consumer benefits: "[T]he decreases in other LMP components (energy price and marginal loss cost) more than

offset the increase in congestion costs, resulting in a net benefit for Illinois consumers from the Project in terms of wholesale electricity prices." *Id*.

Dr. McDermott explained why these reduced wholesale costs demonstrate that the Project meets the Section 8-406(b) of the PUA requirement that a transmission line "promote the development of an effectively competitive electricity market that operates efficiency [and] is equitable to all customers." 220 ILCS 5/8-406(b).

A transmission asset cannot, except indirectly, have an influence on the competitiveness of the retail electricity market. Perhaps the most obvious way to apply this provision of the Act is to ask how wholesale electricity prices affect customers in Illinois. For the ComEd and Ameren retail customers who buy power through the real-time or close to real-time wholesale market, any reduction in wholesale prices will provide a direct and immediate benefit. For those customers that buy power from ComEd or Ameren through the procurement process under the Illinois Power Agency Act ("IPA Act"), the benefit will show up through the daily balancing process the utilities undertake and will subsequently reduce the purchased energy adjustment in the long term as more recent vintage contracts are added to the portfolio. Likewise, for other customers in Illinois who buy power under contracts, the benefit will show up as new contracts are added to their portfolios.

RICL Exhibit 4.0 Revised at page 8. Dr. McDermott also calculated the net present value of these reduced wholesale prices. Dr. McDermott found that the benefits to Illinois consumers under all four futures scenarios through 2020 would be in the range of \$667 million to \$1.2 billion. *Id.* at pages 22-23.

In addition to calculating the dollar value to customers, Dr. McDermott quantified the benefit to competition using the Delivered Price Test ("DPT"). As Dr. McDermott explained, the DPT, outlined in the Federal Energy Regulatory Commission's Merger Policy Statement, "is relevant to the analysis of the Project because it includes a recognized standard for measuring the relevant size of electricity markets for competitive analysis." *Id.* at page 18. Dr. McDermott calculated the Economic Capacity available to supply the Illinois market, "which is defined as the supply that can be delivered into the destination market at a delivered cost less than 105

percent of the destination market price." *Id.* According to Dr. McDermott's calculations, the Project is expected to increase the Economic Capacity available to supply the Illinois market by between 0.4% and 2.4%. RICL Exhibit 4.0 Revised at page 36. This increased economic import capability allows a greater level of lower cost generation resources to compete in the Illinois market. This creates competitive pressure on prices and is sufficient to show that the Project is *promoting* competition in the Illinois wholesale electric market. *Id.* at pages 7-8.

While Mr. Moland and Dr. McDermott did not use a futures scenario with flat or very limited load growth, the record does not include any evidence suggesting that the Project would not promote competition under those conditions. Even if load were flat through 2020, the Project would still bring lower cost generation into Illinois, which would drive down wholesale prices and therefore drive down costs to Illinois ratepayers.

All of the evidence in this case points to the RICL Project as being an effective tool for increasing competition in the Illinois electricity market. The Project will increase the availability of low-cost RECs needed to meet Illinois RPS and other renewable requirements, and will reduce the cost of electricity to Illinois consumers by increasing the amount of low-cost, clean electricity available in the Illinois market. The Project, therefore, meets the requirement of Sections 8-406(b) of the PUA that transmission projects "promote the development of an effectively competitive electricity market." 220 ILCS 5/8-406(b); 220 ILCS 5/8-503.

3. Capable of financing the proposed construction

i. The Commission should adopt Commission Staff's and RICL's financing condition

Section 8-406(b) of the PUA requires any utility seeking a CPCN to demonstrate that it is "capable of financing the proposed construction without significant adverse financial consequences for the utility or its customers." 220 ILCS 5/8-406(b). Under this provision, RICL

does not need to demonstrate that it has secured all of the financing necessary to construct and operate the Project. RICL must only demonstrate that it is "capable" of securing the financing without harming itself or its customers. RICL meets this financing requirement.

Commonwealth Edison ("ComEd") Witness Lapson argued, "The information provided by [RICL] in its Petition and direct testimony demonstrates that [RICL]'s financial resources are not currently sufficient to fund the construction of the proposed Project. At best, the information regarding access to financing can only be described as 'aspirational.'" ComEd Exhibit 2.0 at page 5. Her testimony, even if true, is largely irrelevant. The germane question is whether RICL is "capable" of securing the financing necessary to construct the Project, and she failed to rebut RICL's testimony that it is capable of securing the financing.

Adopting ComEd's interpretation and halting the CPCN process until RICL achieves full financing would effectively eliminate the ability for merchant transmission owners to compete with incumbent utilities, thereby harming competition in the state and eventually resulting in higher rates for Illinois consumers. Competitive merchant transmission owners such as RICL must get financing entirely from outside sources to fund their new projects. There is a chicken and an egg problem inherent in the merchant transmission model. As Mr. Berry explained, "Project lenders always, in my experience, mandate that receipt of the necessary permits and approvals are a condition precedent to funding project loan." RICL Exhibit 10.0 at page 36. Meanwhile, ComEd is arguing that RICL cannot get the necessary permits and regulatory approvals until it secures all financing. To break this stalemate, RICL adopted ICC Staff witness Pregozen's recommended and sensible financing condition. Under this condition, RICL "will not install transmission facilities for the Rock Island Clean Line Project on easement property until such time as Rock Island has obtained commitments for funds in a total amount equal to or

greater than the total project cost." RICL Exhibit 10.13 at page 2. RICL must submit documentation to Commission Staff to establish that it meets this condition. *Id.* at page 3. Given this commitment, which would be a condition to the Commission's order in this proceeding, the Commission can be assured that the Project will not proceed unless and until RICL has all necessary resources in place to complete the Project.

ii. The Commission should not require RICL to subscribe the line before it grants a CPCN

ComEd Witness Naumann further attacks RICL's proposal by noting the "basic uncertainty as to whether or not the market will support the cost of the project as a whole, i.e., whether any customer(s) will contract with [RICL] in sufficient volume to support the required investment, and thus whether the Project actually will be built." ComEd Exhibit 1.0 Revised at pages 12-13. As with its argument regarding financing, ComEd's attack on RICL's lack of customers for transmission service is unreasonable.

As explained above, the record establishes that there is a need, as well as a benefit to Illinois, for the construction of new transmission capacity from the wind-rich area of northwest Iowa and surrounding region to the large load center in northeastern Illinois. This transmission will stimulate the development of new low-cost wind generation. However, as Mr. Berry explained, "[B]ecause of its merchant model, Rock Island needs certainty of cost, schedule and execution before it can enter into contracts with transmission customers [wind developers]. Consequently, Rock Island needs to obtain the key permits and route approvals before it will be able to sell capacity on the Rock Island Project to specific wind farm customers or load serving entities." RICL Exhibit 1.0 at pages 31-32. Timing also matters, since transmission lines require more time to construct than new wind power plants. Mr. Berry explained, "Further, the time required to develop, site, obtain government approvals for, and construct a wind generating

facility is much shorter than the time required to develop, site, obtain government approvals for, and construct a long distance, multi-state transmission line." *Id.* at page 32. It would be unreasonable and inconsistent with the basic market dynamics of merchant transmission projects for the Commission to require RICL to have signed customer contracts for use of the Project in order to be granted a CPCN.

Merchant transmission lines offer much needed competition to incumbent transmission owners. If the Commission places the unreasonable financial conditions ComEd proposes, it could end competitive transmission development in Illinois. RICL bears all of the risk if it cannot properly finance or subscribe its lines. The Commission should not stop merchant transmission projects before they have a chance to begin.

4. Other factors bearing on public convenience and necessity

Section 8-406(b) of the PUA requires the Commission to grant RICL a CPCN before the company can begin construction of the Project. 220 ILCS 5/8-406. While Section 8-406(b) specifically requires a finding that the Project will at a minimum either (a) demonstrate that the project is necessary to provide adequate, reliable, and efficient service to its customers or (b) demonstrate that the proposed construction will promote the development of an effectively competitive electricity market, the law does not *require* the Commission to grant a CPCN if the Project meets one or both of those minimum requirements. Rather, Illinois courts have held, "The Commission has broad discretion to decide whether a petition should be approved under the public convenience standard." *Commonwealth Edison Co. v. ICC*, 295 Ill. App. 3d 311, 317 (Ill. App. Ct. 2d Dist. 1998). This means that the Commission can look outside of the enumerated requirements when determining whether or not to grant utilities a CPCN. Therefore, to the extent that the Project has environmental and other policy benefits beyond the minimum 8-

406(b) requirements, the Commission should take those benefits into account when determining whether or not to grant a CPCN.

i. The Project creates environmental benefits

While the 8-406(b) does not specifically list environmental issues as part of the CPCN requirements, the Commission traditionally considers environmental impacts when evaluating a CPCN application. For example, in Docket No. 06-0706, the ICC held, "The Commission wishes to limit the environmental impacts of any transmission line it approves." Final Order, ICC Docket No. 06-0706 at page 55 (Mar. 11, 2009). In that case, the Commission used "Environmental impacts" as one of eleven factors to determine a transmission line route. *Id.* at page 62. In the end, and after a detailed review of the environmental impacts of the competing alternatives, the Commission approved the "Green Route" in part because it had fewer adverse environmental impacts than the alternative routes. *Id.*

In this case, RICL's Project will not only limit environmental impacts, but will also provide significant environmental *benefits*, a clear boost to the public convenience. By displacing polluting, fossil fuel generation in favor of clean, wind-generated electricity, the Project will lead to significant reductions in emissions of nitrogen oxide ("NOx"), sulfur dioxide ("SOx"), carbon dioxide ("CO2"), and mercury ("Hg"). RICL Exhibit 3.0 at page 11. The Project will also reduce water usage in Illinois and throughout the eastern U.S. *Id*.

In each PROMOD futures scenario Mr. Moland found that the construction and operation of the Project resulted in lower emissions and less water consumption. RICL Exhibit 3.4 at page 1. For example, under the 2020 Business as Usual future 2020, Mr. Moland calculated a reduction of more than 7 million tons of CO2, more than 16,000 tons of SOx, more than 5,000 tons of NOx, 109lbs of Hg, and more than 3 billion gallons in water usage. *Id.* There are even

greater savings under the Slow Growth and Green Economy futures, and only slightly less savings under the Robust Economy future. The following is a chart of Mr. Moland's emissions reduction conclusions:

EXHIBIT 3.4 - EMISSIONS AND WATER USE REDUCTION FROM ROCK ISLAND PROJECT

Emissions (Eastern US)	Effluent (Units)	2016			
		Business as Usual	Slow Growth	Robust Economy	Green Economy
Without Rock Island	NOx (tons)	1,423,542	1,124,315	1,629,927	1,062,298
Without Rock Island	SOx (tons)	2,591,748	1,893,032	3,206,526	2,060,349
Without Rock Island	CO2 (tons)	1,800,490,290	1,572,122,063	1,967,101,455	1,525,819,613
Without Rock Island	Hg (lbs)	30,130	21,561	34,350	23,251
Without Rock Island	Water (MGal)	659,366	557,960	717,928	570,069
With Rock Island	NOx (tons)	1,415,212	1,112,644	1,621,564	1,054,737
With Rock Island	SOx (tons)	2,575,593	1,875,196	3,189,278	2,048,449
With Rock Island	CO2 (tons)	1,791,383,235	1,559,796,244	1,957,361,071	1,515,255,833
With Rock Island	Hg (lbs)	29,991	21,398	34,218	23,050
With Rock Island	Water (MGal)	655,820	553,758	714,287	566,157
Reduction	NOx (tons)	8,330	11,671	8,363	7,561
Reduction	SOx (tons)	16,155	17,836	17,248	11,900
Reduction	CO2 (tons)	9,107,054	12,325,819	9,740,384	10,563,780
Reduction	Hg (lbs)	140	163	133	201
Reduction	Water (MGal)	3,546	4,202	3,641	3,912
Emissions (Eastern US)	Effluent (Units)	2020			
		Business as Usual	Slow Growth	Robust Economy	Green Economy
Without Rock Island	NOx (tons)	1,468,411	1,086,862	1,689,931	1,192,992
Without Rock Island	SOx (tons)	2,649,819	1,754,880	3,429,218	2,308,675
Without Rock Island	CO2 (tons)	1,873,943,746	1,535,452,119	2,086,172,945	1,616,740,696
Without Rock Island	Hg (lbs)	34,866	27,016	38,718	25,195
Without Rock Island	Water (MGal)	697,083	559,767	771,802	630,715
With Rock Island	NOx (tons)	1,462,864	1,077,289	1,686,323	1,185,865
With Rock Island	SOx (tons)	2,633,485	1,740,911	3,420,033	2,293,227
With Rock Island	CO2 (tons)	1,866,869,934	1,524,377,174	2,080,627,252	1,608,882,810
With Rock Island	Hg (lbs)	34,757	26,862	38,659	24,997
With Rock Island	Water (MGal)	693,981	555,754	769,186	627,201
Reduction	NOx (tons)	5,547	9,572	3,608	7,127
Reduction	SOx (tons)	16,334	13,969	9,185	15,448
Reduction	CO2 (tons)	7,073,812	11,074,945	5,545,692	7,857,886
Reduction	Hg (lbs)	109	154	59	198
Reduction	Water (MGal)	3,102	4,013	2,616	3,514

Note: Water is in Millions of Gallons of water consumed (evaporated), not to be confused with total amount of water used in the power plant cooling system.

Id.

Notably, the Project results in environmental benefits even under the unlikely scenario in which the line carries a significant amount of electricity produced by a natural gas-fired power

plant connected to the Project's terminus point in Iowa. This scenario is unlikely because, as Mr. Berry stated, "[I]t would be on average, 0.13 cents to 0.19 cents more expensive per kilowatthour to burn natural gas in Iowa than in Illinois to generate electricity." RICL Exhibit 10.14 at page 43. Therefore, "there is no reason to build new gas generation in Northwest Iowa, subscribe for long-term capacity on the Rock Island Project, and deliver the output of the new gas generation to Northern Illinois." *Id.* However, in the unlikely event that a gas-fired power plant used the Project, environmental benefits would still be significant relative to the base case. In his rebuttal testimony, Mr. Moland performed simulations using PROMOD in which half of the electricity delivered to Illinois by the Project came from gas-fired combined cycle generation. RICL Exhibit 3.6 at pages 4-5. The results of this sensitivity analysis, reproduced below, confirmed the environmental benefits from the Project.

Full Economic Benefit Results for Rock Island with 50% of Capacity from Gas-Fired Combined Cycle

Emissions and Water Use Reduction Results for Rock Island

Emissions (Eastern US) 2016			
		Business as Usua	l Slow Growth
Without Rock Island	NOx (tons)	1,423,542	1,124,315
Without Rock Island	SOx (tons)	2,591,748	1,893,032
Without Rock Island	CO2 (tons)	1,800,490,290	1,572,122,063
Without Rock Island	HG (lbs)	30,130	2315561
Without Rock Island	Water (MGal)	659,366	557,960
With Rock Island	NOx (tons)	1,418,427	1,109,422
With Rock Island	SOx (tons)	2,578,979	1,867,303
With Rock Island	CO2 (tons)	1,795,554,949	1,560,522,498
With Rock Island	HG (lbs)	30,061	21,331
With Rock Island	Water (MGal)	657,621	554,217
Reduction with Rock Island	NOx (tons)	5,115	14,893
Reduction with Rock Island	SOx (tons)	12,769	25,730
Reduction with Rock Island	CO2 (tons)	4,935,340	11,599,565
Reduction with Rock Island	HG (lbs)	70	230
Reduction with Rock Island	Water (MGal)	1,745	3,743
Emissions (Eastern US) 2020			
		Business as Usual	Slow Growth
Without Rock Island	NOx (tons)	1,468,411	1,086,862
Without Rock Island	SOx (tons)	2,649,819	1,754,880
Without Rock Island	CO2 (tons)	1,873,943,746	1,535,452,119
Without Rock Island	HG (lbs)	34,866	2719961
Without Rock Island	Water (MGal)	697,083	559,767
With Rock Island	NOx (tons)	1,464,587	1,073,644
With Rock Island	SOx (tons)	2,635,485	1,735,974
With Rock Island	CO2 (tons)	1,870,013,127	1,520,572,296
With Rock Island	HG (lbs)	34,794	26,752
With Rock Island	Water (MGal)	695,454	556,187
Reduction with Rock Island	NOx (tons)	3,824	13,218
Reduction with Rock Island	SOx (tons)	14,334	18,906
Reduction with Rock Island	CO2 (tons)	3,930,619	14,879,823
	002 (10113)	3,330,013	1,0,0,020
Reduction with Rock Island	HG (lbs)	72	264

Id. These environmental benefits from the Project will help promote the public convenience and necessity.

ii. The Project will help Illinois power generators comply with forthcoming federal carbon pollution standards

Environmental Intervenors also support the Project because of its value to Illinois in meeting the forthcoming federal Clean Air Act carbon pollution standards for existing electric generating units. The U.S. Environmental Protection Agency ("U.S. EPA") is developing these standards under the authority of Section 111(d) of the Clean Air Act, which authorizes the agency to set standards of performance for existing sources of air pollution. 42 U.S.C. § 7411(d). State implementation plans ("SIPs") are the mechanism by which states implement and enforce the Act's source-specific standards. *See* 42 U.S.C. § 7411(g)(1). Each state develops a SIP and submits it to U.S. EPA for approval. Pursuant to a Presidential directive, U.S. EPA intends to issue proposed pollution standards by June 1, 2014, issue final standards by June 1, 2015, and require states to submit their SIPs by June 30, 2016. 78 Fed. Reg. 39,535, 39,537 (July 1, 2013).

The Presidential directive requiring U.S. EPA to set carbon pollution standards for new power plants also expresses a preference for "regulatory flexibilities" to provide states and sources with as many compliance options as possible, including market-based solutions, performance standards, and other options. *Id.* Regardless of Illinois' choice of how to implement Section 111(d), zero-carbon emitting sources of energy such as wind power will be a significant part of the Illinois' compliance strategy. A Commission decision in favor of RICL therefore could provide Illinois with a substantial new source of renewable energy supply to factor into its SIP compliance with the carbon pollution standards.

The timing of the Commission's approval is also important. Early approval would allow Illinois, and other states in the region, to plan for and factor the project into their SIP proposals. Early approval would also allow entities subject to Section 111(d) to plan for the use of renewable energy resources that the Project will deliver into PJM in Illinois. Granting approval

now also would send a positive market signal to wind energy developers to develop more resources to help meet Section 111(d) compliance. Therefore, granting RICL's petition now will promote the public convenience and necessity by facilitating Illinois and regional compliance with the new carbon pollution standards.

iii. Lack of interconnection agreements with regional transmission organizations should not preclude a CPCN

To date, RICL has not signed interconnection agreements with the regional transmission organizations, PJM and the Midcontinent ISO ("MISO"). Before RICL can energize its line, it must get approval from PJM and MISO stating that the Project will not cause reliability problems on the grid. As Mr. Berry explained, "The PJM reliability study process is set up so that developers of merchant transmission lines must attain certain milestones in order to maintain their interconnection queue positions and sign an interconnection agreement." RICL Exhibit 10.14 Revised at page 25. ComEd argues that "the ICC should not move forward absent," among other things, complete PJM and MISO interconnection agreements. ComEd Exhibit 1.0 2d Revised at page 48.

Interconnection agreements with PJM and MISO are the culmination of studies determining what, if any, network upgrades RICL must complete to reliably interconnect the Project. RICL Exhibit 10.14 Revised at page 19. These agreements will set forth any transmission upgrades or mitigation measures to maintain the reliability of the system. *Id.* RICL is required by law and federal regulation to complete all required interconnection studies before the Project can interconnect with PJM and MISO. *Id.* at page 35. Further, RICL has stated in this case that it would be willing to accept a condition whereby RICL would not energize the Project before signing the required interconnection agreements. *Id.*

The RTOs have direct responsibility for ensuring completion of the studies in order to ensure interconnection of the Project is accomplished in a manner that does not jeopardize the reliability of the system. While there is no doubt that ComEd has an interest in ensuring that the Project does not negatively impact its customers' reliability, it has ample opportunity to take part at the PJM and MISO level. As Mr. Berry explained:

In the PJM interconnection studies, PJM calls upon ComEd to provide data and analyses used in the [interconnection] studies. Further, ComEd is given the opportunity by PJM to provide input and comments on the system impact and stability study inputs, assumptions and results, including expressing its position to PJM as to what system upgrades should be required or preferred for the Rock Island interconnection. . . . ComEd also has the opportunity to be involved in the MISO No-Harm Study and in fact participated in the kick-off meeting for the MISO study held on July 11, 2013.

RICL Exhibit 10.14 Revised at page 26. The RTOs, and not this Commission, are the right venue to address ComEd's concerns about the Project's interconnection. The RTOs, operating under their tariffs, can resolve any disagreements while ensuring that the Project will interconnect reliably with the grid. Rock Island 10.14 Revised at page 26.

Putting the CPCN approval on hold until the MISO and PJM interconnection agreements are complete is unreasonable. The CPCN allows RICL to move forward with the Project in a variety of ways that will be stalled if the Commission requires interconnection agreements first, including: access to landowner property for purposes of conducting surveys, including necessary environmental, cultural and engineering surveys; detailed landowner negotiations for easements based on the known, approved route; detailed engineering and pole spotting; and completion of all necessary ROW agreements. These activities are in no way related to the interconnection processes at PJM and MISO and should not be put on hold until the completion of these processes. RICL Exhibit 10.14 Revised at page 22. As Mr. Berry explained, "[D]elaying consideration of Rock Island's Petition as the ComEd witnesses suggest does nothing to protect

the public, and needlessly burdens Rock Island and the consumers who would benefit from the additional competitive supply of energy, capacity and renewable energy credits ("REC"s) provided by the Project." *Id.* at page 27.

V. Public Utilities Act §8-503 – Order Authorizing and Directing Construction

Under Section 8-503 of the PUA, when the Commission finds that a transmission project will "promote the development of an effectively competitive electricity market," the Commission will issue an order authorizing and directing construction of the project. 220 ILCS 5/8-503. As explained above with regard to Section 8-406(b), the RICL Project will promote an effectively competitive electricity market. Therefore, the Commission should authorize and direct construction of the Project so that RICL can take the next important steps in the Project's development.

VII. Conclusion/Request for Relief

RICL seeks a CPCN pursuant to Section 8-406 of the PUA, and authorization and direction from the Commission to construct the Project pursuant to Section 8-503 of the PUA. Those sections require RICL to demonstrate that its Project will promote the development of an effectively competitive electricity market in Illinois and generally promote the public convenience and necessity. As detailed above, the Project will satisfy these requirements by reducing the cost to Illinois ratepayers of both RECs and electricity, reduce emissions and water use in Illinois, and help the state comply with the forthcoming national carbon pollution standards. RICL has taken the appropriate steps to finance the project at no risk to Illinois ratepayers and will do everything required to ensure that the Project will have no adverse impacts on reliability. The Commission, therefore, should act now to grant RICL a CPCN and issue an order authorizing and directing RICL to construct the Project.

Dated: January 31, 2014

Respectfully submitted,

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